	L#	Hits	Search Text	DBs	Time Stamp
1	L1	24318 8	dual specificity phosphatase\$1	USPAT; US-PGPUB	2002/03/27 11:59
2	L2	56	dual adj specificity adj phosphatase\$1		2002/03/27 11:59
3	L3	14	: 2 naama human	USPAT; US-PGPUB	2002/03/27 12:00

PGPUB-DOCUMENT-NUMBER: 20020034807

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020034807 A1

TITLE: 38692 and 21117, novel dual specificity phosphatase molecules and uses

therefor

PUBLICATION-DATE: March 21, 2002

INVENTOR-INFORMATION:

NAME CITY

STATE COUNTRY RULE-47

Meyers, Rachel A.

Newton

MA US

US-CL-CURRENT: 435/196,435/325 ,435/6 ,435/69.1 ,435/7.1 ,514/44 ,530/388.1

.536/23.2

ABSTRACT:

The invention provides isolated nucleic acids molecules, designated 38692 or 21117 nucleic acid molecules, which encode novel dual specificity phosphatase family members. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing 38692 or 21117 nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a 38692 or 21117 gene has been introduced or disrupted. The invention still further provides isolated 38692 or 21117 proteins, fusion proteins, antigenic peptides and anti-38692 or 21117 antibodies. Diagnostic methods utilizing compositions of the invention are also provided.

DATE FIL	ED:	March	23,	2001
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DRTX:

[0080] FIG. 3A depicts alignment of a <u>dual specificity phosphatase catalytic</u> <u>domain (DSPc) with human</u> 21117 amino acid sequence, with a consensus amino acid sequence derived from a hidden Markov model. The upper sequence is the consensus amino acid sequence (SEQ ID NO:7), while the lower amino acid sequence corresponds to amino acids 158-297 of SEQ ID NO:2. FIG. 3B depicts alignment of a dual specificity phosphatase catalytic domain (dsp.sub.--5) (SEQ ID NO:8) with amino acids 158 to 297 of 21117 (SEQ ID NO:2).

DETX:

[0104] In a preferred embodiment, a 21117 or 38692 polypeptide or protein has a "dual specificity phosphatase catalytic domain" or a region that includes at least about 50 to 250, preferably about 100 to 200, more preferably about 120

to 160, and even more preferably about 130 to 150 amino acid residues and has at least about 70% 80% 90% 95%, 99%, or 100% homology with a "dual specificity phosphatase catalytic domain," e.g., the <u>dual specificity phosphatase catalytic</u> <u>domain of human</u> 21117 (e.g., residues 158 to 297 of SEQ ID NO:2) or 38692 (e.g., residues 28 to 173 of SEQ ID NO:5).

DFTX.

[0105] To identify the presence of a "dual specificity phosphatase catalytic domain" in a 21117 or 38692 protein sequence and to make the determination that a polypeptide or protein of interest has a particular profile, the amino acid sequence of the protein can be searched against a database of HMMs (e.g., the Pfam database, release 2.1) using default parameters (http://www.sanger.ac.uk/Software/Pfam/HMM search). For example, the hmmsf program, which is available as part of the HMMER package of search programs, is a family specific default program for MILPAT0063 and a score of 15 is the default threshold score for determining a hit. Alternatively, the threshold score for determining a hit can be lowered (e.g., to 8 bits). A description of the Pfam database can be found in Sonhammer et al. (1997) Proteins 28(3):405-420 and a detailed description of HMMs can be found, for example, in Gribskov et al.(1990) Meth. Enzymol. 183:146-159; Gribskov et al.(1987) Proc. Natl. Acad. Sci. USA 84:4355-4358; Krogh et al.(1994) J. Mol. Biol. 235:1501-1531; and Stultz et al.(1993) Protein Sci. 2:305-314, the contents of which are incorporated herein by reference. A search was performed against the HMM database resulting in the identification of a "dual specificity phosphatase catalytic domain" e.g., the dual specificity phosphatase catalytic domain of human 21117 (FIG. 4A-B) or human 38692 (FIG. 8A-B).

PGPUB-DOCUMENT-NUMBER: 20020009797

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020009797 A1

TITLE: Growth stimulation of biological cells and tissue by electromagnetic

fields and uses thereof

PUBLICATION-DATE: January 24, 2002

INVENTOR-INFORMATION:

NAME CITY

STATE COUNTRY RULE-47

Wolf, David A. Houston TX US

Goodwin, Thomas J. Friendswood TX US

US-CL-CURRENT: 435/289.1,435/173.8 ,435/298.2

ABSTRACT:

The present invention provides systems for growing two or three dimensional mammalian cells within a culture medium facilitated by an electromagnetic field, and preferably, a time varying electromagnetic field. The cells and culture medium are contained within a fixed or rotating culture vessel, and the electromagnetic field is emitted from at least one electrode. In one embodiment, the electrode is spaced from the vessel. The invention further provides methods to promote neural tissue regeneration by means of culturing the neural cells in the claimed system. In one embodiment, neuronal cells are grown within longitudinally extending tissue strands extending axially along and within electrodes comprising electrically conductive channels or guides through which a time varying electrical current is conducted, the conductive channels being positioned within a culture medium.

DATE FILED:	February	28,	2001
KWIC			

DETL:

5TABLE 5 Down Regulated Genes in Descending Order (Highest to lowest) 1. Homo sapiens (clone Zap2) mRNA fragment [Incyte PD:1661837] 2. CDC28 protein kinase 2 [Incyte PD:1384823] 3. Synteni: YCFR 22 [YC 22.2000.W] 4. ESTs, Moderately similar to cell growth regulating nucleolar protein LYAR [M.musculus][Incyte PD:2233551] 5. KERATIN, TYPE II CYTOSKELETAL 7 [Incyte PD:1649959] 6. MITOTIC KINESIN-LIKE PROTEIN-1 [Incyte PD:2640427] 7. EST [Incyte PD:674714] 8. Synteni: YCFR 22 [YC 22.2000.X] 9. Synteni: YCFR 26 [YC 26.0062.N] 10. Synteni: YCFR 22 [YC 22.2000.Z] 11. Transcription factor 6-like 1 (mitochondrial transcription factor 1-like) [Incyte PD:337 1995] 12. Interferon-inducible 56-KDa protein [Incyte PD:1215596] 13. EST [Incyte

PD:17943751 14. Homo sapiens mitotic feedback control protein Madp2 homolog mRNA, complete cds [Incyte PD:24 14624] 15. EST [Incyte PD:151026] 16. Homo sapiens Pig3 (PIG3) mRNA, complete cds [Incyte PD: 2395269] 17. General transcription factor IIIA [Incyte PD: 1527070] 18. Cellular retinoic acid-binding protein [human, skin, mRNA, 735 nt] [Incyte PD:585432] 19. EST [Incyte PD:1755159] 20. Homo sapiens mRNA for K1AA0285 gene, complete cds [Incyte PD: 1738053] 21. ESTs, Weakly similar to F25H5.h [C.elegans] [Incyte PD: 19235671 22. Homo sapiens mRNA expressed in osteoblast, complete cds [Incyte PD:2537863] 23. EST [Incyte PD:3204745] 24. Homo sapiens mRNA for serine/threonine protein kinase SAK [Incyte PD:2732630] 25. Homo sapiens serum-inducible kinase mRNA, complete cds [Incyte PD: 1255087] 26. Carbonic anhydrase II [Incyte PD:2474163] 27. EST [Incyte PD:660376] 28. GRANCALCIN [Incyte PD:1671852] 29. N-CHIIMAERIN [Incyte PD:1852659] 30. Homo sapiens Pig10 (PIG10) mRNA, complete cds [Incyte PD:1731061] 31. Adenylosuccinatelyase [Incyte PD: 1653326] 32. EST [Incyte PD:1798393] 33. Homo sapiens HP protein (HP) mRNA, complete cds [Incyte PD:3084122] 34. ESTs, Moderately similar to T10C6.i [C.elegans] [Incyte PD:1923186] 35. Chromosome condensation 1 [Incyte PD:3180854] 36. Calmodulin 1 (phosphorylase kinase, delta) [Incyte PD: 2803306] 37. Centromere protein A (17kD) [Incyte PD:2444942] 38. V-jun avian sarcoma virus 17 oncogene homolog [Incyte PD: 1920177] 39. Human glutathione-S-transferase homolog mRNA, complete cds [Incyte PD: 1862232] 40. Homo sapiens gene for protein involved in sexual development, complete cds [Incyte PD:3033934] 41. EST [Incyte PD:2630992] 42. Human low-Mr GTP-binding protein (RAB32) mRNA, partial cds [Incyte PD:1662688] 43. Annexin III (lipocortin III) [Incyte PD:1920650] 44. Hydroxymethylbilane synthase [Incyte PD:1509204] 45. Synteni: HK 4 [HK 4.2000.YI 46. Ribosomal protein L7a [Incyte PD:2579602] 47. Human mRNA for myosin regulatory light chain [Incyte PD: 78783] 48. Ferredoxin reductase [Incyte PD:1819763] 49. Human copper transport protein HAH1 (HAH1) mRNA, complete cds [Incyte PD:2313349] 50. Human G protein gamma-11 subunit mRNA, complete cds [Incyte PD:1988432] 51. Synteni: HK 4 [HK 4.2000.W] 52. Human XIST, coding sequence a mRNA (locus DXS399E) [Incyte PD:1514318) 53. Ribosomal protein, large, P0 [Incyte PD:3511355] 54. Homo sapiens clone 23714 mRNA sequence [Incyte PD:1728368] 55. Human mRNA for Apol Human (MER5(Aopl-Mouse)-like protein), complete cds [Incyte PD:2527879] 56. Synteni: 1K 4 [HK 4.2000.Z] 57. Proteasome (prosome, macropain) subunit, beta type, 5 [Incyte PD:2503119] 58. Human PINCH protein mRNA, complete cds [Incyte PD:126888] 59. Homo sapiens peroxisome assembly protein PEX10 mRNA, complete cds [Incyte PD:998279] 60. Homo sapiens short chain L-3-hydroxyacyl-CoA dehydrogenase (SCHAD) mRNA, complete cds [Incyte PD:16388501 61. Neuroblastoma RAS viral (v-ras) oncogene homolog [Incyte PD:2816984] 62. H.sapiens mRNA for b4 integrin interactor [Incyte PD:1932850] 63. Human forkhead protein FREAC- 1 mRNA, complete cds [Incyte PD:1449920] 64. Human mRNA for protein D123, complete cds [Incyte PD:1920522] 65. H.sapiens mRNA for A-kinase anchoring protein AKAP95 [Incyte PD:1628787] 66. Carbonyl reductase [Incyte PD:1633249] 67. EST [Incyte PD:2060973] 68. ESTs, Highly similar to GUANINE NUCLEOTIDE-BINDING PROTEIN G(I)/G(S)/G(O) GAMMA-7 SUBUNIT [Rattus norvegicus] [Incyte PD:1640161] 69. Homo sapiens Na+/Ca+ exchanger mRNA sequence [Incyte PD:2880435] 70. STRESS-ACTIVATED PROTEIN KINASE JNK1 [Incyte PD:3331719] 71. Homo sapiens leupaxin mRNA, complete cds [Incyte PD: 1595756] 72. CLEAVAGE SIGNAL-1 PROTEIN [Incyte PD:2054053] 73. EST [Incyte PD:1798965] 74. Human DNA from overlapping chromosome 19 cosmids

R31396, F25451, and R31076 containing COX6B and UPKA, genomic sequence [Incyte PD:1320685] 75. INTERFERON-INDUCED 17 1(1) PROTEIN [Incyte PD: 2862971] 76. Human homolog of yeast IPP isomerase [Incyte PD:1526240] 77. Translation elongation factor 1 gamma [Incyte PD:3138196] 78. Tropomyosin alpha chain (skeletal muscle) [Incyte PD:1572555] 79. Aplysia ras-related homolog 9 [Incyte PD:2733928] 80. ATP SYNTHASE ALPHA CHAIN, MITOCHONDRIAL PRECURSOR [Incyte PD:3206210] 81. Homo sapiens androgen receptor associated protein 24 (ARA24) mRNA, complete cds [Incyte PD:552654] 82. Glucagon [Incyte PD:1333075] 83. Human enhancer of rudimentary homolog mRNA, complete cds [Incyte PD: 1704472] 84. TRANSCRIPTIONAL ENHANCER FACTOR TEF-1 [Incyte PD:29571751 85. Ubiquitin-like protein [Incyte PD:1754454] 86. Human RGP4 mRNA, complete cds [Incyte PD:617517] 87. Cellular retinol-binding protein [Incyte PD:1612969] 88. Ornithine decarboxylase 1 [Incyte PD:1930235] 89. EST [Incyte PD:3605632] 90. EST [Incyte PD:2057260] 91. ESTs, Weakly similar to CAMP-DEPENDENT PROTEIN KINASE TYPE 2 [Saccharomyces cerevisiae] [Incyte PD:2055611] 92. Human p37NB mRNA, complete cds [Incyte PD:1407110] 93. Human mRNA for suppressor for yeast mutant, complete cds [Incyte PD:2888814] 94. EST [Incyte PD:3142705] 95. ESTs, Weakly similar to KO1H12.1 [C. elegans] [Incyte PD:56197] 96. Cell division cycle 2, G1 to S and G2 to M [Incyte PD:1525795] 97. EST [Incyte PD:1794175] 98. EST [Incyte PD:1489557] 99. ESTs, Weakly similar to PROTEIN PHOSPHATASE PP2A, 72 KD REGULATORY SUBUNIT [H. sapiens] [Incyte PD:2379045] 100. CAMP-DEPENDENT PROTEIN KINASE TYPE II-ALPHA REGULATORY CHAIN [Incyte PD:1649731] 101. ESTs, Weakly similar to transcription factor [H. sapiens] [Incyte PD:1637517] 102. ATP synthase, H+ transporting, mitochondrial F1 complex, 0 subunit (oligomycin sensitivity conferring protein) [Incyte PD:2193246] 103. RAS-LIKE PROTEIN TC21 [Incyte PD:2505425] 104. Small nuclear ribonucleoprotein polypeptides B and B 1 [Incyte PD:2071473] 105. EST [Incyte PD:1922084] 106. Proliferating cell nuclear antigen [Incyte PD:2781405] 107. ESTs, Highly similar to HIGH MOBILITY GROUP-LIKE NUCLEAR PROTEIN 2 [Saccharomyces cerevisiae] [Incyte PD:2669174] 108. EST [Incyte PD:1844150] 109. Human mRNA for proteasome subunit HsC10-11, complete cds [Incyte PD:1737833] 110. Homo sapiens mRNA for ST1C2, complete cds [Incyte PD:3993007] 111. Human dual specificity phosphatase tyrosine/serine mRNA, complete cds [Incyte PD:1514573] 112. Human stimulator of TAR RNA binding (SRB) mRNA, complete cds [Incyte PD:2057162] 113. EST [Incyte PD:2507206]

PGPUB-DOCUMENT-NUMBER: 20010049358

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20010049358 A1

TITLE: DSP-12 and DSP-13 dual-specificity phosphatases

PUBLICATION-DATE: December 6, 2001

INVENTOR-INFORMATION:

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STATE COUNTRY RULE-47

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US

US-CL-CURRENT: 514/12,435/196 ,435/325 ,435/6 ,435/69.1 ,435/7.1

ABSTRACT:

Compositions and methods are provided for the treatment of conditions associated with cell proliferation, cell differentiation and cell survival. In particular, the dual-specificity phosphatases DSP-12 and DSP-13, and polypeptide variants thereof that stimulate dephosphorylation of DSP-12 and DSP-13 substrates, are provided. The polypeptides may be used, for example, to identify antibodies and other agents that inhibit DSP-12 and/or DSP-13 activity. The polypeptides and agents may be used to modulate cell proliferation, differentiation and survival.

DATE FILED:	February	1,	2001

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DETX:

[0123] A conserved sequence motif defining a novel homology domain of dual-specificity phosphatases was identified as follows: Dual specificity phosphatases belong to the larger family of protein tyrosine phosphatases (PTPs) that share a conserved catalytic domain containing a cysteine residue situated N-terminal to a stretch of five variable amino acids followed by an arginine residue (Fauman et al. Trends In Bioch. Sci. 21:413-417, 1996). DSPs typically contain a PTP active site motif but lack sequence homology to PTPs in other regions (Jia, Biochem, and Cell Biol 75:17-26, 1997). There is, however, no reported consensus sequence that is conserved among DSPs, nor is a consensus region apparent from examination of the known DSP sequences such as those referred to above. To derive a longer consensus DSP amino acid sequence motif that would be useful for the identification of new DSP family members, multiple known <a href="https://dx.doi.org/10.1001/journal.org/10.1001/jou

candidate conserved homology region was identified. This homology region consisted of a 24-amino acid peptide sequence, based on analysis of the DSP regions, situated on either side of, and including, the PTP active site signature motif (including the conserved catalytic domain at positions 123-129 of FIG. 6). Thus, a candidate peptide having the sequence:

DOCUMENT-IDENTIFIER: US 6335170 B1 TITLE: Gene expression in bladder tumors

DATE-ISSUED: January 1, 2002 INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY Orntoft; Torben F. DK 8230 Aabyhoj N/A N/A DKX

US-CL-CURRENT: 435/6,435/91.1 ,435/91.2 ,536/23.1 ,536/24.3 ,536/24.31 ,536/24.33 ABSTRACT:

Methods for analyzing tumor cells, particularly bladder tumor cells employ gene expression analysis of samples. Gene expression patterns are formed and compared to reference patterns. Alternatively gene expression patterns are manipulated to exclude genes which are expressed in contaminating cell populations. Another alternative employs subtraction of the expression of genes which are expressed in contaminating cell types. These methods provide improved accuracy as well as alternative basis for analysis from diagnostic and prognostic tools currently available.

21 Claims, 24 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 15

DATE FILED: February 22, 2000

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DETL:

153 520 451 160 190 K03204 f_at Human PRB1 locus salivary protine-rich protein "mRNA," clone "cP3," complete cds 20 20 20 20 20 K03207 f at Human PR84 locus salivary protine-rich protein "mRNA," complete cds 20 20 20 20 20 20 K03218_at Human c-src-1 proto-oncogene 20 20 20 96 166 35 K03430 at Human complement C1q B-chain gene 61 212 20 47 212 630 K03431_cds1_at HPR gene (haptoglobin-related protein) extracted from Human haptoglobin gene (alpha-2 allele) 127 163 319 186 382 203 K03460_at Human alpha-tubulin isotype H2-atpha "gene," last exon 215 632 659 359 192 232 K03474 at Human Mullerian inhibiting substance "gene." complete cds 20 20 20 20 20 20 K03494 s at Human green cone photoreceptor pigment gene 1 20 20 20 20 20 20 K03498 xpt1 s at pot protein from Human endogenous retrovirus HERV-K22 pot and envelope ORF region. /gb=K03498 /ntype=DNA /annot=CDS 97 124 266 148 514 172 K03515_at Human neuroleukin "mRNA," complete cds 183 88 311 338 150 20 L00022_s_at Human Ig active epsiton1 5' "UT," V-D-J region subgroup "VH-I," gene 20 20 20 20 399 107 L00058_at Human (GH) germline c-myc "protooncogene," 5' flank 127 21 24 36 20 32 L00137_cds1_at Human growth hormone-releasing factor (GRF) gene, exon 5. 59 20 20 65 131 52 L00190_s_at 20 20 20 20 20 20 L00205 at Human K6b (epidermal "keratin," type II) gene 154 20 20 20 80 20 L00352_at Human low density lipoprotein receptor gene 169 51 20 38 224 20 L00354_at Human cholecystokinin (CCK) gene 20 20 20 20 20 20 L00389_f_at

Human cytochrome P-450 4 gene 78 301 157 167 524 222 L00634 s at Human famesyl-protein transferase alpha-subunit "mRNA," complete cds 60 71 134 197 20 35 L00635_at Human famesyl-protein transferase beta-subunit "mRNA," complete cds 31 20 95 82 34 38 L00972 at Human cystathionine-beta-synthase (CBS) mRNA 55 66 93 66 20 69 L01042_at Human HIV1 tata element modulatory factor mRNA sequence from chromosome 3 20 27 20 20 25 20 L01087_at Human protein kinase C-theta (PRKCT) "mRNA," complete cds 20 20 20 20 89 77 L01406 at Human growth hormone-releasing hormone receptor "mRNA," complete cds 20 20 20 20 20 20 L01664_at Human eosinophil Charcot-Leyden crystal (CLC) protein (tysophospholipase) "mRNA," complete cds 20 20 31 20 20 30 L02320_at Human radixin "mRNA," complete cds 20 37 20 59 20 59 L02321_at Human glutathione S-transferase (GSTM5) "mRNA," complete cds 168 61 110 56 30 111 L02326_f_at Homo sapiens (clone Hu lambda-17) lambda-like "gene," complete cds 409 566 61 81 20 734 L02426 at Human 26S protease (64) regulatory subunit "mRNA," complete cds 191 242 248 191 170 178 L02547_at Homo sapiens (clone pZ50-19) cleavage stimulation factor 50kDa "subunit," complete cds 20 20 20 20 20 L02648 at Homo sapiens (clone V6) transcobalamin II TCN2) "mRNA," complete cds 20 20 20 20 52 30 L02785 at Homo sapiens colon mucosa-associated (DRA) "mRNA," complete cds 20 20 20 20 38 L02840 at Homo sapiens potassium channel Kv2.1 "mRNA," complete cds 30 20 42 71 142 20 L02867_at Homo sapiens 62 kDa paraneoplastic antigen "mRNA," 3' end 30 20 20 126 149 70 L02932 at Human peroxisome proliferator activated receptor "mRNA," complete cds 20 20 20 39 101 20 L02950 at Human mu-crystallin "mRNA," complete cds 63 20 20 20 20 42 L03411s_at Human RD protein (RD) "mRNA," complete cds 55 118 100 110 20 155 L03427_at Human zinc finger protein basonuclin "mRNA," complete cds 38 20 23 20 20 21 L03532 at Human M4 protein "mRNA," complete cds 187 112 159 204 45 152 L03785 at Human regulatory myosin tight chain (MYLS) "mRNA," complete cds 139 140 53 144 198 194 L03640_s_at Human fibroblast growth factor receptor 4 (FGFR4) "mRNA," complete cds 20 72 20 20 136 20 L04270 at Homo sapiens (xlone CD18) tumor necrosis factor receptor 2 related protein "mRNA," complete cds 143 20 20 303 20 20 L04282_at Human CACCC bos-binding protein "mRNA," complete cds 20 31 20 39 128 20 L04483_s_at Human ribosomal protein S21 (RPS21) "mRNA," complete cds 5632 11710 13374 9903 4063 3700 L04490 at Homo sapiens (clone CC6) NADH-ubiquinone oxidoreductase subunit "mRNA," 3' end cds 85 99 152 61 20 20 L04510 at Human nucleotide binding protein "mRNA," complete cds 20 20 20 20 30 23 L04569_at Homo sapiens (clone hHT-1) L-type voltage-dependent calcium channel a1 subunit (hHT) "mRNA," complete cds 20 20 20 20 20 20 L04656_at Homo sapiens carbonic anhydrase related protein (CARP) "mRNA," complete cds 20 20 33 20 20 20 L04731_at Homo sapiens translocation T(4:11) of ALL-1 gene to chromosome 4 20 110 49 22 21 20 L04733 at Homo sapiens kinesin light chain "mRNA," complete cds 20 63 20 25 20 20 L04751 at Human cytochrome p-450 4A (CYP4A) "mRNA," complete cds 20 20 20 20 44 20 L04947_at Homo sapiens (clones "B73.081.8," BT3.129.5 and BT4.169) receptor tyrosine kinase (KDR) "mRNA," 3' end cds 20 20 20 20 20 20 L04953_at Human x11 protein (x11) "mRNA," 3' end 20 20 29 20 42 140 L05072 s at Homo sapiens interferon regulatory factor 1 "gene," complete cds 20 20 20 20 108 69 L05144_at Homo sapiens (clone lamda-hPEC-3) phosphoenolpyruvate carboxykinase (PCK1) "mRNA," complete cds 20 36 20 26 164 91 L05147 at Human dual specificity phosphatase tyrosine/serine "mRNA," complete cds 20 20 20 20 20 49 L06148 at Human protein tyrosine kinase related mRNA sequence 63 37 20 36 20 96 L05187 at Homo sapiens small protein-rich protein 1 (SPRR1A) "gene," complete cds 6544 209 170 173 956 362

L05188 f at Homo sapiens small protein-rich protein 2 (SPRR28) "gene," complete cds 4465 72 100 80 20 20 L05424_cds2_at Human cell surface glycoprotein CD44 (CD44) gene, 3' end of long tailed isoform. 20 25 20 20 20 20 L05425_at Homo sapiens autoantigen "mRNA," complete cds 20 23 59 27 20 70 L05500 at Human fetal brain adenylyl cyclase "mRNA," 3' end 20 20 20 20 20 20 L05512_at Human histatin 1 (HIS1) gene 115 93 20 104 479 480 L05514 f at Human histatin 3 (HIS2) gene 20 20 20 20 35 20 L05515_at Homo sapiens CAMP response element-binding protein (CRE-BP1) "mRNA," complete cds 20 20 20 20 20 20 L05568 at Human Na+/CI- dependent serotonin transporter "mRNA," complete cds 20 20 58 20 20 29 L05597_at Human serotonin receptor "gene," complete cds 20 20 20 20 20 20 L05606_at Human myosin binding protein H "mRNA," complete cds 20 20 20 20 20 L05624_s_at Homo sapiens MAP kinase kinase "mRNA," complete cds 20 20 20 20 20 L05628 s at Human multidrug resistance-associated protein (MRP) "mRNA," complete cds 20 20 20 20 20 20 L05779_at Human cytosotic epoxide hydrotase "mRNA," complete cds 109 36 98 126 74 20 L06132 at Human voltage-dependent anion channel isoform 1 (VDAC) "mRNA," complete cds 159 122 316 320 28 163 L06133 at Human putative Cu++-transporting P-type ATPase "mRNA." complete cds 20 20 20 20 20 20 L06139 at Homo sapiens receptor protein-tyrosine kinase (TEK) "mRNA," complete cds 20 20 20 52 20 20 L06147_at Human (clone SY11) golgin-95 "mRNA," complete cds 31 20 20 20 20 20 L06175 at Homo Sapiens P5-1 "mRNA," complete cds 21 20 20 20 20 20 L06419_at Homo sapiens tysyl hydroxylase (PLOD) "mRNA," complete cds 89 20 20 20 20 20 L06499 at Homo sapiens ribosomal protein L37a (RPL37A) "mRNA," complete cds 6064 12530 9976 6472 5173 4453 L06505_at Human ribosomal protein L12 "mRNA," complete cds 3024 4194 3548 3986 1317 2187 L06633_at Human transcription factor "mRNA," complete cds 25 20 20 49 183 38 L06797 s at Human (clone L5) orphan G protein-coupled receptor "mRNA," complete cds 109 20 89 20 589 150 L06845 at Human cysteinyl-tRNA synthetase "mRNA," partial cds 20 20 20 20 92 20 L06895_at Homo sapiens antagonizer of myc transcriptional activity (Mad) "mRNA," complete cds 20 20 20 20 20 20 L07033 at Human hydroxymethylglutaryl-COA lyase "mRNA,"

DOCUMENT-IDENTIFIER: US 6331614 B1

TITLE: Human CDC14A gene
DATE-ISSUED: December 18, 2001

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Wong; Alexander K. C. La Jolla CA N/A N/A Teng; David H. -F. Salt Lake City UT N/A N/A Tavtigian; Sean V. Salt Lake City UT N/A N/A

US-CL-CURRENT: 536/23.5,435/320.1 ,435/325 ,536/23.1 ABSTRACT:

The present invention relates generally to the field of human genetics. Specifically, the present invention relates to human CDC14A gene which has been found to be mutated in certain tumor cell lines. More specifically, the invention relates to a novel sequence for the human CDC14A gene. The present invention further relates to somatic mutations in the CDC14A gene in human cancer and their use in the diagnosis and prognosis of human cancer. The invention also relates to the therapy of human cancers which have a mutation in the CDC14A gene, including gene therapy, protein replacement therapy and protein mimetics. The invention further relates to the screening of drugs for cancer therapy. Finally, the invention relates to the screening of the CDC14A gene for mutations, which are useful for diagnosing the predisposition to cancer.

14 Claims, 1 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 1

DATE FILED: December 22, 1999

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BSPR:

It has been amply demonstrated that different members of the same tumor suppressor gene family are targeted for mutation during cancer development. For examples, TP53 and p51 in the p53 family (Osada et al, 1998); RB and p130 in the retinoblastoma family (Helin et al, 1997); Smad 2 and 4 in the Smad family (Eppert et al, 1996; Hahn et al, 1996; Howe et al, 1998); cadE and cadH in the cadherin family (Miki et al, 1997; Hiraguri et al, 1998; Guilford et al, 1998; Sato et al, 1998) are mutated in either primary tumors or tumor cell lines. It is therefore plausible that members in the MMAC1/PTEN phosphatase gene family may be targeted. Recently a human homolog to yeast CDC14 has been cloned and shown to share homology with the phosphatase domain and ser/thr rich C-terminal domain of MMAC1/PTEN (Li et al, 1997). Human CDC14 A is a dual-specificity phosphatase which can functionally complement a yeast strain that carries a cdc14-1.sup.ts allele (Li et al, 1997). Under certain conditions, human MMAC1/PTEN can also complement the same yeast temperature sensitive strain (Li et al, 1997). A similarity in structural and functional

relationship implies that these phosphatases may target common substrates that are involved in the process of tumor suppression.

DEPR:

Human CDC14A is a dual-specificity phosphatase which shares similarity with the recently identified tumor suppressor MMAC1/PTEN. We hypothesize that homologs in the phosphatase gene family may be targeted for mutation during tumorigenesis. By radiation hyrid mapping, we localize CDC14A to chromosome 1p, a region that has been shown to exhibit loss of heterozygosity in certain types of tumors. Screening of a panel of 138 cDNAs from tumor cell lines for coding mutations, we identify a 48 bp in-frame deletion in the cDNA of the breast cell line MDA-MB-436. Further, by mapping the exon/intron structure of the CDC14A gene, we show definitively the deletion is the result of an acceptor splice site mutation at exon 13 in the genome. The invariant AG was converted to AT. The accompanying loss of expression of the wild type allele in the same breast cell line reinforces the possibility that CDC14A may be a tumor suppressor, perhaps exerting its effect at the cell cycle.

DEPR:

The precise biological function of human CDC14A is not well understood. However, recent studies have shown that yeast CDC4 is a dual-specificity serine/threonine-tyrosine phosphatase whose activity is required for cell cycle function (Taylor et al, 1997; Grandin et al, 1998). Additionally some genetic studies have suggested that it may be involved in initiating DNA replication (Hardy, 1996). Although human cdc-144 is a dual-specificity phosphatase, there is yet any convincing evidence to show that it shares similar targets and function in common biochemical pathways as MMAC1/PTEN. Nevertheless, the perturbation of pathways in cell cycle and/or DNA replication could have detrimental effects, such as leading to uncontrolled cell growth and/or inaccurate replication of essential genes.

DOCUMENT-IDENTIFIER: US 6331396 B1

TITLE: Arrays for identifying agents which mimic or inhibit the activity of

interferons

DATE-ISSUED: December 18, 2001

INVENTOR-INFORMATION:

NAME

CITY

STATE ZIP CODE COUNTRY

Silverman: Robert H. Beachwood ОН N/A Williams; Bryan R. G. Cleveland OH N/A

N/A N/A

Der: Sandy

Cleveland

OH

N/A

N/A

US-CL-CURRENT: 435/6,435/287.2 ,536/23.1 ,536/23.52 ,536/24.3 ,536/24.3 .536/24.2 .536 ABSTRACT:

Methods and model systems for identifying and characterizing new therapeutic agents, particularly proteins, which mimic or inhibit the activity of all interferons, Type I interferons, IFN-.alpha., IFN-.beta., or IFN-.gamma.. The method comprises administering an interferon selected from the group consisting of IFN-.alpha., IFN .beta., IFN-.tau., IFN-.omega., IFN-.gamma., and combinations thereof to cultured cells, administering the candidate agent to a duplicate culture of cells; and measuring the effect of the candidate agent and the interferon on the transcription or translation of one or, preferably, a plurality of the interferon stimulated genes or the interferon repressed genes (hereinafter referred to as "ISG's" and "IRGs", respectively). The model system is an array with gene probes that hybridize with from about 100 to about 5000 ISG and IRG transcripts.

8 Claims, 0 Drawing figures Exemplary Claim Number: 1

DATE FI	LED: S	eptember	23.	1999
_,			,	

----- KWIC -----

DETL:

1.4 0.24 -501 D 1.3 0.16 X96924 H. sapiens gene encoding mitochrondrial citrate transport protein 679 -140 NC 0 0 -247 MD 1.6 0.24 217 I 1.3 0.11 U00947 Human clone C4E 3.2 (CAC)n/(GTG)n repeat-containing mRNA -- Also Represents: 860 83 NC 0 0 402 | 1.5 0.24 160 | 1.2 0.05 10469 -1403 NC 0 0 -1969 D 1.2 0.24 -1192 NC 0 0 HG429-HT429 B-Cell Growth Factor 1 159 26 NC 0 0 124 | 1.8 0.24 -63 NC 0 0 M25077 Human SS-A/Re ribonucleoprotein autoantigen 60 kd subunit "mRNA," complete cds -18 * 20 NC 0 0 59 I .about.2.0 0.24 -1 NC 0 0 S74728 antiquitin = 26g turgor protein homolog "[human," "kidney," "mRNA," 1809 nt] 67 0 NC 0 0 67 I 2 0.24 1 NC 0 0 U37426 Human kinesin-like spindle protein HKSP (HKSP) "mRNA," complete cds 14 * -21 NC 0 0 33 I about 2.3 0.24 -13 NC 0 0 X14684 Human mRNA for La protein C-terminal region -- "Also Represents: X13697, M20328 65 -18 NC 0 0 64 I 2 0.24 -41 NC 0 0 Z80777 H. sapiens H2A/k gene -6 * 13 NC 0 0 49 I .about.2.1 0.24 5 NC 0 0 D14826 Human mRNA for hCREM (cyclic AMP-responsive element modulator) type 2 "prote 23 * 24 NC 0 0 31 | 12.3 0.23 19 | 1.8 0.11 | 20 * 12

NC 0 0 28 MI .about.2.4 0.23 9 NC 0 0 L29008 Human L-iditol-2 dehydrogenase "mRNA," complete cds 139 39 NC 0 0 108 MI 1.8 0.23 49 NC 0 0 U40369 Human spermidine/spermine N1-acetyltransferase (SSAT) "gene," complete cds 21 12 NC 0 0 29 I 2.4 0.23 3 NC 0 0 U57341 Human neurofilament triplet L protein "mRNA," partial cds. /gb = U57341 /ntype = RNA 23 * 20 NC 0 0 30 MI 2.3 0.23 15 NC 0 0 U76189 Human EXTL3 "mRNA," partial cds. /gb = U76189 /ntype = RNA 15 * -2 NC 0 0 31 I .about.2.3 0.23 -5 NC 0 0 M29064 Human hnRNP B1 protein mRNA 377 -77 NC 0 0 213 I 1.6 0.22 -174 D 1.9 0.32 G3936-HT420 Interleukin 9 Receptor (Gb:S71404) 45 * -15 NC 0 0 -32 MD .about.2.2 0.22 -39 NC 0 0 L19161 Human translation initiation factor eIF-2 gamma subunit "mRNA," complete cds 56 20 NC 0 0 55 | 2 0.22 -2 NC 0 0 M14113 Human coagulation factor VIII:C "mRNA," complete cds 11 * -22 D .about.1.0 0 33 I .about.2.2 0.22 5 NC 0 0 S82024 SCG10 = neuron-specific growth-associated protein/stathmin homolog "[human," "emb 12 * 8 NC 0 0 33 I .about.2.2 0.22 -4 NC 0 0 U67171 Human selenoprotein W (selW) "mRNA," complete cds. /gb = U67171 /ntype = RNA 586 100 NC 0 0 -213 MD 1.6 0.22 -12 NC 0 0 7780 -799 NC 0 0 -1472 D 1.2 0.21 -223 NC 0 0 D78361 Human mRNA for omithine decarboxylase "antizyme," ORF 1 and ORF 2 6151 -96 NC 0 0 -1256 D 1.3 0.21 -366 NC 0 0 G2981-HT312 "Epican," Alt. Splice 1 -- "Also Represents: HG2981-HT3934, HG2981-HT3931, HG29 408 113 NC 0 0 222 | 1.5 0.21 46 NC 0 0 L27706 Human chaperonin protein (Tcp20) gene complete cds 163 26 NC 0 0 114 I 1.7 0.21 -58 NC 0 0 M31520 Human ribosomal protein S24 mRNA -- Also Represents: HG3214-HT3391 73 -23 NC 0 0 -38 D 2.1 0.21 -25 NC 0 0 M37197 Human CCAAT-box-binding factor (CBF) "mRNA," complete cds 21 * 0 NC 0 0 27 MI 2.3 0.21 -19 NC 0 0 U09510 Human glycyl-tRNA synthetase "mRNA," complete cds --Also Represents: U09587 445 66 NC 0 0 234 I 1.5 0.21 12 NC 0 0 U51990 Human hPrp18 "mRNA," complete cds -3 * 12 NC 0 0 44 | .about,2.0 0.21 7 NC 0 0 U78027 L44L gene (L44-like ribosomal protein) extracted from Human Bruton's tyrosine kinas 39 * -22 NC 0 0 -56 D .about.2.0 0.21 6 NC 0 0 U94832 Human KH type splicing regulatory protein KSRP "mRNA," complete cds. 336 137 NC 0 0 193 I 1.6 0.21 85 NC 0 0 Y08612 H. sapiens mRNA for Nup88 protein 105 34 NC 0 0 85 MI 1.8 0.21 23 NC 0 0 D31767 Human mRNA for KIAA0058 "gene." complete cds 171 65 NC 0 0 115 I 1.7 0.2 71 MI 1.4 0.09 D13627 Human mRNA for KIAA0002 "gene," complete cds 277 42 NC 0 0 162 | 1.6 0.2 -86 NC 0 0 D26018 Human mRNA for KIAA0039 "gene," partial cds 12 * 20 NC 0 0 31 I .about.2.1 0.2 11 NC 0 0 D80005 Human mRNA for KIAA0183 "gene," partial cds 111 -11 NC 0 0 86 I 1.8 0.2 22 NC 0 0 L05147 Human dual specificity phosphatase tyrosine/serine "mRNA," complete cds 54 -7 NC 0 0 -29 D 2.2 0.2 -15 NC 0 0 L35546 Homo sapiens gamma-glutamylcysteine synthetase light subunit "mRNA," complete 150 33 NC 0 0 107 MI 1.7 0.2 43 NC 0 0 U06698 Human neuronal kinesin heavy chain "mRNA," complete cds 4 * 18 NC 0 0 38 | .about,2,1 0,2 15 NC 0 0 X66899 H. sapiens EWS mRNA 438 -74 NC 0 0 228 I 1.5 0.2 61 NC 0 0 Z70759 H, sapiens mitochondrial 16S rRNA gene (partial). /gb = Z70759 /ntype = RNA 6416 -979 NC 0 0 1445 MI 1.2 0.2 -699 NC 0 0 D31887 Human mRNA for KIAA0062 "gene," partial cds 270 49 NC 0 0 156 I 1.6 0.19 45 NC 0 0 G2815-HT402 "Myosin." Light "Chain," "Alkali," Smooth Muscle "(Gb:U02629)," Smooth "Muscle," A 4909 -209 NC 0 0 -1007 D 1.3 0.19 -815 NC 0 0 L40357 Homo sapiens thyroid receptor interactor (TRIP7) "mRNA," 3' end of cds 8 * 13 NC 0 0 33 I .about.2.1 0.19 1 NC 0 0 M15661 Human ribosomal protein "mRNA," complete cds 297 100 NC 0 0 168 I 1.6 0.19 56 NC 0 0 M31642 Human hypoxanthine phosphoribosyltransferase (HPRT) "mRNA," complete cds 9 * -18 NC 0 0 33 | .about.2.1 0.19 -12 MD .about.1.0 0 U21090 Human DNA polymerase delta small subunit "mRNA," complete

cds 383 57 NC 0 0 -142 D 1.6 0.19 100 NC 0 0 U28833 Human Down syndrome critical region protein (DSCR1) "mRNA," complete cds 12 * -2 NC 0 0 30 I .about.2.1 0.19 8 NC 0 0 U29607 Human methionine aminopeptidase "mRNA," complete cds 3 * 1 NC 0 0 38 Ml .about.2.0 0.19 5 NC 0 0 U56637 Human capping protein alpha subunit isoform 1 "mRNA," complete cds 352 -102 NC 0 0 187 I 1.5 0.19 -190 NC 0 0 X51688 Human mRNA for cyclin A 121 43 NC 0 0 88 MI 1.7 0.19 7 NC 0 0 Z49254 H. sapiens L23-related mRNA 451 76 NC 0 0 212 I 1.5 0.18 212 I 1.5 0.18 Z19554 H. sapiens vimentin gene -- Also Represents: M18895 cds2 Same Unigene Cluster a 7150 -730 NC 0 0 -1301 D 1.2 0.18 -954 MD 1.2 0.11 D86960 Human mRNA for KIAA0205 "gene," complete cds -3 * 9 NC 0 0 42 L.about.2.0 0.18 27 L.about.1.2 0.02 Y00636 Human mRNA for lymphocyte function associated antigen-3 (LFA-3) 10 * 11 MI .about.1.1 0 31 | .about.2.1 0.18 13 I .about.1.2 0.01 D43951 Human mRNA for KIAA0099 "gene," complete cds 26 * 0 NC 0 0 29 I 2.1 0.18 2 NC 0 0 D63878 Human mRNA for KIAA0158 "gene," complete cds 265 -38 NC 0 0 146 | 1.6 0.18 -68 NC 0 0 D64015 Homo sapiens mRNA for T-cluster binding "protein," complete cds. /gb = D64105 /ntyp 1 * 11 NC 0 0 39 I .about.2.0 0.18 12 NC 0 0 D78514 Human mRNA for ublquitin-conjugating "enzyme," complete cds 23 * 22 NC 0 0 26 I 2.1 0.18 5 NC 0 0 D86978 Human mRNA for KIAA0225 "gene," partial cds 85 14 NC 0 0 66 I 1.8 0.18 39 NC 0 0 L77886 Human protein tyrosine phosphatase "mRNA," complete cds 85 0 NC 0 0 65 I 1.8 0.18 -23 NC 0 0 S82597 Description: UDP-GalNAc:polypeptide N-acetylgalactosaminyltransferase gene extra 0 * 9 NC 0 0 40 I .about.2.0 0.18 -1 NC 0 0 X95384 H. sapiens mRNA for unknown 14kDa protein 11 * -14 NC 0 0 30 I .about.2.1 0.18 -6 NC 0 0 D84361 Human mRNA for p52 and p64 isoforms of "N-Shc," complete cds 37 * -39 NC 0 0 -49 D .about.1.8 0.17 -54 MD .about.1.8 0.18 7968 -1139 NC 0 0 -1340 D 1.2 0.17 -532 NC 0 0 D86967 Human mRNA for KIAA0212 "gene," complete cds 50 * -6 NC 0 0 44 MI 1.9 0.17 8 NC 0 0 G3521-HT371 Ras-Related Protein Rap1b 81 27 NC 0 0 62 I 1.8 0.17 7 NC 0 0 K02268 Human enkephalin B (enkB) "gene," 5' flank and 13 * 13 NC 0 0 28 I .about.2.1 0.17 23 NC 0 0 L03532 Human M4 protein "mRNA," complete cds 291 -35 NC 0 0 150 I 1.5 0.17 -48 NC 0 0 L05624 Homo sapiens MAP kinase kinase "mRNA," complete cds -- Also Represents: L11284 112 14 NC 0 0 78 I 1.7 0.17 -9 NC 0 0 L09209 Homo sapiens amyloid protein homologue "mRNA," complete cds -- Also Represents: 128 22 NC 0 0 86 MI 1.7 0.17 55 NC 0 0 L78440 Homo sapiens STAT4 "mRNA," complete cds 17 * 21 NC 0 0 25 I .about.2.1 0.17 14 NC 0 0 M19283 Human cytoskeletal gamma-actin "gene," complete cds 2495 -252 NC 0 0 -582 D 1.3 0.17 -305 NC 0 0 U28749 Human high-mobility group phosphoprotein isoform I-C (HMGIC) "mRNA," complete 101 -51 NC 0 0 71 I 1.7 0.17 -42 NC 0 0 U73477 Human acidic nuclear phosphoprotein pp32 "mRNA," complete cds -- Also Represent 41 * 23 NC 0 0 37 I 1.9 0.17 -27 NC 0 0 U90913 Human clone 23665 mRNA sequence 366 151 NC 0 0 178 I 1.5 0.17 134 NC 0 0 X93499 H. sapiens mRNA for RAB7 protein 453 -35 NC 0 0 206 | 1.5 0.17 -25 NC 0 0 L35249 Homo sapiens vacuolar H+-ATPase Mr "56,000" subunit (HO57) "mRNA," complete 156 106 NC 0 0 95 MI 1.6 0.16 204 I 2.3 0.59 D28423 Human mRNA for pre-mRNA splicing factor "SRp20," 5'UTR (sequence from the 5'ca 1179 -127 NC 0 0 388 I 1.3 0.16 -429 D 1.6 0.31 D26067 Human mRNA for KIAA0033 "gene," partial cds 19 * 10 NC 0 0 23 I .about.2.1 0.16 -3 NC 0 0 G3076-HT323 Heterogeneous Nuclear Ribonucleoprotein "K," Alt. Splice 1 --Also Represents: X727 702 145 NC 0 0 277 | 1.4 0.16 8 NC 0 0 | J00139 Human dihydrotolate reductase gene -- "Also Represents: HG2846-HT2983, J00146 46 28 NC 0 0 41 I 1.9 0.16 33 NC 0 0 L05188 Homo sapiens small proline-rich protein 2 (SPRR2B) "gene," complete cds 46 -11 NC 0 0 -24 D 2.1 0.16 -15 NC 0 0

U24266 Human pyrroline-5-carboxylate dehydrogenase (P5CDh) "mRNA,"

DOCUMENT-IDENTIFIER: US 6268135 B1

TITLE: Phospholipase molecule and uses therefor

DATE-ISSUED: July 31, 2001 INVENTOR-INFORMATION:

NAME CITY

STATE ZIP CODE COUNTRY

Acton; Susan Lexington

MA N/A N/A

US-CL-CURRENT: 435/6,435/198 ,435/21 ,435/252.3 ,435/320.1 ,530/350 ,536/23.2

,536/23.5 ABSTRACT:

Novel CSAPL polypeptides, proteins, and nucleic acid molecules are disclosed. In addition to isolated, full-length CSAPL proteins, the invention further provides isolated CSAPL fusion proteins, antigenic peptides and anti-CSAPL antibodies. The invention also provides CSAPL nucleic acid molecules, recombinant expression vectors containing a nucleic acid molecule of the invention, host cells into which the expression vectors have been introduced and non-human transgenic animals in which a CSAPL gene has been introduced or disrupted. Diagnostic, screening and therapeutic methods utilizing compositions of the invention are also provided.

14 Claims, 3 Drawing figuresExemplary Claim Number: 1Number of Drawing Sheets: 3

DATE FILED: September 30, 1998

----- KWIC -----

ORPL:

Ishibashi, T. et al. "Expression cloning of a <u>human dual-specificity</u> <u>phosphatase</u>" Proc. Natl. Acad. Sci. U S A. Dec. 15, 1992;89(24):12170-4.

DOCUMENT-IDENTIFIER: US 6258582 B1

TITLE: CSAPTP nucleic acid molecules and uses therefor

DATE-ISSUED: July 10, 2001 INVENTOR-INFORMATION:

NAME CITY

CITY

STATE ZIP CODE COUNTRY

Acton: Susan

Jamaica Plain MA N/A N/A

US-CL-CURRENT: 435/196,435/252.3 ,435/320.1 ,435/69.1 ,530/350 ,536/23.2 ,536/23.5

ABSTRACT:

Novel CSAPTP polypeptides, proteins, and nucleic acid molecules are disclosed. In addition to isolated, full-length CSAPTP proteins, the invention further provides isolated CSAPTP fusion proteins, antigenic peptides and anti-CSAPTP antibodies. The invention also provides CSAPTP nucleic acid molecules, recombinant expression vectors containing a nucleic acid molecule of the invention, host cells into which the expression vectors have been introduced and non-human transgenic animals in which a CSAPTP gene has been introduced or disrupted. Diagnostic, screening and therapeutic methods utilizing compositions of the invention are also provided.

23 Claims, 10 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 10

DATE FILED: September 30, 1998

----- KWIC -----

DRPR:

FIG. 6 depicts a global alignment between the CSAPTP-2 protein sequence and the <a href="https://www.human.com/human

ORPL:

Ishibashi, T. et. al. (1992) "Expression cloning of a <u>human dual-specificity</u> phosphatase" Proc. Natl. Acad. Sci. USA 89(24):12170-12174.

DOCUMENT-IDENTIFIER: US 6162897 A

TITLE: 17q-linked breast and ovarian cancer susceptibility gene

DATE-ISSUED: December 19, 2000

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

N/A N/A Skolnick: Mark H. Salt Lake City UT Goldgar; David E. Salt Lake City UT N/A N/A Miki; Yoshio Salt Lake City UT N/A N/A Salt Lake City UT N/A N/A Swenson; Jeff Salt Lake City UT N/A N/A Kamb; Alexander N/A Harshman; Keith D. Salt Lake City UT N/A UT N/A N/A Shattuck-Eidens; Donna Salt Lake City N/A N/A Salt Lake City UT N/A Durham NC N/A Tavtigian; Sean V. NC N/A N/A Wiseman; Roger W. Durham

Futreal; P. Andrew

US-CL-CURRENT: 530/350,424/174.1 ,435/7.1

ABSTRACT:

The present invention relates generally to the field of human genetics. Specifically, the present invention relates to methods and materials used to isolate and detect a human breast and ovarian cancer predisposing gene (BRCA1), some mutant alleles of which cause susceptibility to cancer, in particular breast and ovarian cancer. More specifically, the invention relates to germline mutations in the BRCA1 gene and their use in the diagnosis of predisposition to breast and ovarian cancer. The present invention further relates to somatic mutations in the BRCA1 gene in human breast and ovarian cancer and their use in the diagnosis and prognosis of human breast and ovarian cancer. Additionally, the invention relates to somatic mutations in the BRCA1 gene in other human cancers and their use in the diagnosis and prognosis of human cancers. The invention also relates to the therapy of human cancers which have a mutation in the BRCA1 gene, including gene therapy, protein replacement therapy and protein mimetics. The invention further relates to the screening of drugs for cancer therapy. Finally, the invention relates to the screening of the BRCA1 gene for mutations, which are useful for diagnosing the predisposition to breast and ovarian cancer.

3 Claims, 19 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 18

DATE	FILED:	May	2,	1997

----- KWIC -----

ORPL:

Ishibashi, T., et al. (1992). "Expression cloning of a <u>human dual-specificity</u> <u>phosphatase,</u>" Proc. Natl. Acad. Sci. USA 89:12170-12174.

DOCUMENT-IDENTIFIER: US 6074851 A

TITLE: Catalytic macro molecules having cdc25B like activity

DATE-ISSUED: June 13, 2000 INVENTOR-INFORMATION:

NAME

CITY

STATE ZIP CODE COUNTRY

Deibel, Jr.; Martin R. Kalamazoo MI N/A N/A Yem; Anthony W. Kalamazoo MI N/A N/A Wolfe; Cindy L. Portage MI N/A N/A

US-CL-CURRENT: 435/69.7,435/194

ABSTRACT:

This invention discloses novel forms of catalytic macro molecules that are related to cdc25B, a cell cycle specific phosphatase. These special domains of cdc25B, special fusions with GST, and unique peptides and proteins, their utility, and the method of making them are all described.

3 Claims, 6 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 9

DATE FILED: May 1, 1997

----- KWIC -----

BSPU:

P. Aroca, D. P. Bottatro, T. Ishibashi, S. A. Aaronson, and E. Santos. "Human dual specificity phosphatase VHR activates maturation promotion factor and triggers meiotic maturation in Xenopus oocytes." J. Biol. Chem., vol. 270(23), pp. 14229-34 (1995).

BSPU:

T. Ishibashi, D. P. Bottaro, A. Chan, T. Miki, and S. A. Aaronson. "Expression cloning of a <u>human dual-specificity phosphatase.</u>" Proc. Natl. Acad. Sci., U.S.A., vol. 89(24), pp. 12170-4 (1992).

DOCUMENT-IDENTIFIER: US 5753441 A

TITLE: 170-linked breast and ovarian cancer susceptibility gene

DATE-ISSUED: May 19, 1998 INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

N/A Skolnick; Mark H. Salt Lake City UT N/A Goldgar; David E. Salt Lake City UT N/A N/A Miki; Yoshio Salt Lake City UT N/A N/A Swenson: Jeff Salt Lake City UT N/A N/A Kamb; Alexander Salt Lake City UT N/A N/A Harshman; Keith D. Salt Lake City UT N/A N/A Shattuck-Eidens; Donna Salt Lake City UT N/A N/A Salt Lake City N/A N/A M. UT NC Tavtigian: Sean V. Durham N/A N/A

Wiseman; Roger W. Durham NC N/A N/A

Futreal; P. Andrew

US-CL-CURRENT: 435/6,424/1.11 ,435/4 ,435/7.1 ,435/7.2 ,435/7.9 ,435/91.1 ,435/91.2 ,436/500 ,436/548 ,530/387.2 ,530/388.1 ,536/23.1 ,536/24.3 ,536/24.33 ABSTRACT:

The present invention relates generally to the field of human genetics. Specifically, the present invention relates to methods and materials used to isolate and detect a human breast and ovarian cancer predisposing gene (BRCA1), some mutant alleles of which cause susceptibility to cancer, in particular breast and ovarian cancer. More specifically, the invention relates to germline mutations in the BRCA1 gene and their use in the diagnosis of predisposition to breast and ovarian cancer. The present invention further relates to somatic mutations in the BRCA1 gene in human breast and ovarian cancer and their use in the diagnosis and prognosis of human breast and ovarian cancer. Additionally, the invention relates to somatic mutations in the BRCA1 gene in other human cancers and their use in the diagnosis and prognosis of human cancers. The invention also relates to the therapy of human cancers which have a mutation in the BRCA1 gene, including gene therapy, protein replacement therapy and protein mimetics. The invention further relates to the screening of drugs for cancer therapy. Finally, the invention relates to the screening of the BRCA1 gene for mutations, which are useful for diagnosing the predisposition to breast and ovarian cancer.

37 Claims, 19 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 18

DATE FILED: January 5, 1996

----- KWIC -----

ORPL:

Ishibashi, T., et al. (1992). "Expression cloning of a <u>human dual-specificity</u> <u>phosphatase,</u>" Proc. Natl. Acad. Sci. USA 89:12170-12174.

DOCUMENT-IDENTIFIER: US 5710001 A

TITLE: 17q-linked breast and ovarian cancer susceptibility gene

DATE-ISSUED: January 20, 1998 INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

N/A Skolnick; Mark H. Salt Lake City UT N/A Goldgar; David E. Salt Lake City UT N/A N/A Salt Lake City UT N/A N/A Miki; Yoshio UT N/A N/A Salt Lake City Swenson; Jeff UT N/A N/A Salt Lake City Kamb; Alexander N/A Salt Lake City UT N/A Harshman; Keith D. Shattuck-Eidens; Donna Salt Lake City UT N/A N/A N/A N/A M. Salt Lake City UT NC N/A N/A Tavtigian; Sean V. Durham N/A N/A Wiseman; Roger W. Durham NC

Futreal; P. Andrew

US-CL-CURRENT: 435/6,435/7.1 ,435/7.9 ,435/91.2 ,530/300 ,530/350 ,530/388.1 ,536/23.1 ,536/24.3 ,536/24.33

ABSTRACT:

The present invention relates generally to the field of human genetics. Specifically, the present invention relates to methods and materials used to isolate and detect a human breast and ovarian cancer predisposing gene (BRCA1), some mutant alleles of which cause susceptibility to cancer, in particular breast and ovarian cancer. More specifically, the invention relates to germline mutations in the BRCA1 gene and their use in the diagnosis of predisposition to breast and ovarian cancer. The present invention further relates to somatic mutations in the BRCA1 gene in human breast and ovarian cancer and their use in the diagnosis and prognosis of human breast and ovarian cancer. Additionally, the invention relates to somatic mutations in the BRCA1 gene in other human cancers and their use in the diagnosis and prognosis of human cancers. The invention also relates to the therapy of human cancers which have a mutation in the BRCA1 gene, including gene therapy, protein replacement therapy and protein mimetics. The invention further relates to the screening of drugs for cancer therapy. Finally, the invention relates to the screening of the BRCA1 gene for mutations, which are useful for diagnosing the predisposition to breast and ovarian cancer.

35 Claims, 19 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 18

DATE FILED: June 7, 1995

----- KWIC -----

ORPL:

Ishibashi, T., et al. (1992). "Expression cloning of a human dual-specificity

phosphatase," Proc. Natl. Acad. Sci. USA 89:12170-12174.

DOCUMENT-IDENTIFIER: US 5709999 A

TITLE: Linked breast and ovarian cancer susceptibility gene

DATE-ISSUED: January 20, 1998 INVENTOR-INFORMATION:

NAME CITY

STATE ZIP CODE COUNTRY

Shattuck-Eidens; Donna Salt Lake City UT N/A N/A

M. Simard; Jacques

St. Augustin de N/A
Desmaures

N/A CAX N/A N/A CAX

Durocher; Francine

Ste-Foy

N/A N/A JPX

Emi; Mitsuuru

Tokyo

N/A N/A JPX

Nakamura: Yusuke

Yokohama

US-CL-CURRENT: 435/6,435/91.2 ,536/23.1 ,536/24.3 ,536/24.33 ABSTRACT:

The present invention relates generally to the field of human genetics. Specifically, the present invention relates to methods and materials used to isolate and detect a human breast and ovarian cancer predisposing gene (BRCA1), some mutant alleles of which cause susceptibility to cancer, in particular breast and ovarian cancer. More specifically, the invention relates to germline mutations in the BRCA1 gene and their use in the diagnosis of predisposition to breast and ovarian cancer. The present invention further relates to somatic mutations in the BRCA1 gene in human breast and ovarian cancer and their use in the diagnosis and prognosis of human breast and ovarian cancer. Additionally, the invention relates to somatic mutations in the BRCA1 gene in other human cancers and their use in the diagnosis and prognosis of human cancers. The invention also relates to the therapy of human cancers which have a mutation in the BRCA1 gene, including gene therapy, protein replacement therapy and protein mimetics. The invention further relates to the screening of drugs for cancer therapy. Finally, the invention relates to the screening of the BRCA1 gene for mutations, which are useful for diagnosing the predisposition to breast and ovarian cancer.

35 Claims, 19 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 18

DATE FILED: June 7, 1995

----- KWIC -----

ORPL:

Ishibashi, T., et al. (1992). "Expression cloning of a <u>human dual-specificity</u> <u>phosphatase,"</u> Proc. Natl. Acad. Sci USA 89:12170-12174.

DOCUMENT-IDENTIFIER: US 5573935 A

TITLE: Protein tyrosine kinase A6 DATE-ISSUED: November 12, 1996

INVENTOR-INFORMATION:

NAME CITY

STATE ZIP CODE COUNTRY

Beeler; John F. Bethesda MD N/A N/A Larochelle; William Gaithersburg MD N/A N/A Aaronson; Stuart A. Great Falls VA N/A N/A

US-CL-CURRENT: 435/194,435/252.3 ,435/252.33 ,435/320.1 ,435/69.8 ,536/23.2

,536/23.5 ,930/240

ABSTRACT:

A novel protein tyrosine kinase (A6) exhibiting no significant similarity to any known kinase. This protein in widely expressed throughout the body and is present in a variety of vertebrates. The cDNA was expressed in bacteria as a fusion protein which was both autophosphorylated and exhibited kinase activity toward exogenous substrates. Potential uses of this invention include immunodiagnostics and antiproliferative therapeutics.

10 Claims, 1 Drawing figures Exemplary Claim Number: 1,9 Number of Drawing Sheets: 1

DATE FILED: January 18, 1994

----- KWIC -----

ORPL:

Ishibashi, et al., "Expression Cloning Of A <u>Human Dual-Specificity</u> <u>Phosphatase</u>", Proc. Natl. Acad. Sci. USA 89: 12170-12174, 1992.

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ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILES 'MEDLINE, SCISEARCH, LIFESCI, BIOTECHDS, BIOSIS, EMBASE, HCAPLUS, NTIS, ESBIOBASE, BIOTECHNO, WPIDS' ENTERED AT 13:28:20 ON 27 MAR 2002 ALL COPYRIGHTS AND RESTRICTIONS APPLY. SEE HELP USAGETERMS FOR DETAILS.

11 FILES IN THE FILE LIST

=> s dual specificity phosphatase#

FILE 'MEDLINE'

37210 DUAL

384747 SPECIFICITY

92955 PHOSPHATASE#

L1 203 DUAL SPECIFICITY PHOSPHATASE#

(DUAL (W) SPECIFICITY (W) PHOSPHATASE#)

FILE 'SCISEARCH'

64521 DUAL

125325 SPECIFICITY

57061 PHOSPHATASE#

L2 317 DUAL SPECIFICITY PHOSPHATASE#

(DUAL (W) SPECIFICITY (W) PHOSPHATASE#)

FILE 'LIFESCI'

9959 "DUAL"

56834 "SPECIFICITY"

18689 PHOSPHATASE#

L3 95 DUAL SPECIFICITY PHOSPHATASE#

("DUAL"(W) "SPECIFICITY"(W) PHOSPHATASE#)

FILE 'BIOTECHDS'

717 DUAL

6973 SPECIFICITY

2543 PHOSPHATASE#

L4 10 DUAL SPECIFICITY PHOSPHATASE#

(DUAL (W) SPECIFICITY (W) PHOSPHATASE#)

FILE 'BIOSIS'

40156 DUAL

160667 SPECIFICITY

98434 PHOSPHATASE#

L5 207 DUAL SPECIFICITY PHOSPHATASE#

(DUAL (W) SPECIFICITY (W) PHOSPHATASE#)

FILE 'EMBASE'

35671 "DUAL"

158566 "SPECIFICITY"

66307 PHOSPHATASE#

L6 170 DUAL SPECIFICITY PHOSPHATASE#

("DUAL"(W) "SPECIFICITY"(W) PHOSPHATASE#)

FILE 'HCAPLUS'

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145784 SPECIFICITY
         103044 PHOSPHATASE#
            232 DUAL SPECIFICITY PHOSPHATASE#
L7
                  (DUAL(W)SPECIFICITY(W)PHOSPHATASE#)
FILE 'NTIS'
          12620 DUAL
           3115 SPECIFICITY
            693 PHOSPHATASE#
L8
              3 DUAL SPECIFICITY PHOSPHATASE#
                  (DUAL (W) SPECIFICITY (W) PHOSPHATASE#)
FILE 'ESBIOBASE'
         12970 DUAL
          46154 SPECIFICITY
          19218 PHOSPHATASE#
L9
            172 DUAL SPECIFICITY PHOSPHATASE#
                  (DUAL (W) SPECIFICITY (W) PHOSPHATASE#)
FILE 'BIOTECHNO'
          8572 DUAL
         73363 SPECIFICITY
         21371 PHOSPHATASE#
            133 DUAL SPECIFICITY PHOSPHATASE#
L10
                  (DUAL(W)SPECIFICITY(W)PHOSPHATASE#)
FILE 'WPIDS'
         42918 DUAL
          6235 SPECIFICITY
          2857 PHOSPHATASE#
L11
             19 DUAL SPECIFICITY PHOSPHATASE#
                  (DUAL(W) SPECIFICITY(W) PHOSPHATASE#)
TOTAL FOR ALL FILES
          1561 DUAL SPECIFICITY PHOSPHATASE#
L12
=> s (112 \text{ or dsp})(w)3
FILE 'MEDLINE'
          1021 DSP
       2240187 3
L13
              3 (L1 OR DSP) (W) 3
FILE 'SCISEARCH'
          3228 DSP
       2055460 3
L14
              7 (L2 OR DSP) (W) 3
FILE 'LIFESCI'
           441 DSP
        367177 3
L15
             0 (L3 OR DSP) (W) 3
FILE 'BIOTECHDS'
            24 DSP
        102186 3
L16
             3 (L4 OR DSP) (W) 3
FILE 'BIOSIS'
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61251 DUAL

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1134 DSP
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2064585 3

L17 4 (L5 OR DSP) (W) 3

FILE 'EMBASE'

854 DSP

1378649 3

L18 4 (L6 OR DSP) (W) 3

FILE 'HCAPLUS'

1623 DSP

5406174 3

L19 9 (L7 OR DSP) (W) 3

FILE 'NTIS'

411 DSP

283672 3

L20 0 (L8 OR DSP) (W) 3

FILE 'ESBIOBASE'

363 DSP

525813 3

L21 1 (L9 OR DSP) (W) 3

FILE 'BIOTECHNO'

175 DSP

418967 3

L22 3 (L10 OR DSP) (W) 3

FILE 'WPIDS'

2113 DSP

3545053 3

L23 22 (L11 OR DSP) (W) 3

TOTAL FOR ALL FILES

L24 56 (L12 OR DSP) (W) 3

=> s 112(5a)human

FILE 'MEDLINE'

7637528 HUMAN

L25 15 L1 (5A) HUMAN

FILE 'SCISEARCH'

940493 HUMAN

L26 17 L2 (5A) HUMAN

FILE 'LIFESCI'

294731 HUMAN

L27 8 L3 (5A) HUMAN

FILE 'BIOTECHDS'

41266 HUMAN

L28 2 L4 (5A) HUMAN

FILE 'BIOSIS'

5122919 HUMAN

L29 19 L5 (5A) HUMAN

FILE 'EMBASE'

4355026 HUMAN

L30 13 L6 (5A) HUMAN

FILE 'HCAPLUS'

982696 HUMAN

L31 26 L7 (5A) HUMAN

FILE 'NTIS'

78015 HUMAN

L32 2 L8 (5A) HUMAN

FILE 'ESBIOBASE'

299608 HUMAN

L33 12 L9 (5A) HUMAN

FILE 'BIOTECHNO'

628763 HUMAN

L34 10 L10(5A) HUMAN

FILE 'WPIDS'

101122 HUMAN

L35 3 L11(5A)HUMAN

TOTAL FOR ALL FILES

L36 127 L12(5A) HUMAN

=> s (124 or 136) not 2001-2002/py

FILE 'MEDLINE'

570638 2001-2002/PY

L37 16 (L13 OR L25) NOT 2001-2002/PY

FILE 'SCISEARCH'

1080223 2001-2002/PY

L38 21 (L14 OR L26) NOT 2001-2002/PY

FILE 'LIFESCI'

83855 2001-2002/PY

L39 7 (L15 OR L27) NOT 2001-2002/PY

FILE 'BIOTECHDS'

11976 2001-2002/PY

L40 2 (L16 OR L28) NOT 2001-2002/PY

FILE 'BIOSIS'

524216 2001-2002/PY

L41 18 (L17 OR L29) NOT 2001-2002/PY

FILE 'EMBASE'

484218 2001-2002/PY

L42 16 (L18 OR L30) NOT 2001-2002/PY

FILE 'HCAPLUS'

1150892 2001-2002/PY

L43 23 (L19 OR L31) NOT 2001-2002/PY

FILE 'NTIS'

0 2001-2002/PY

L44 2 (L20 OR L32) NOT 2001-2002/PY

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313211 2001-2002/PY
L45
            12 (L21 OR L33) NOT 2001-2002/PY
FILE 'BIOTECHNO'
        131581 2001-2002/PY
            12 (L22 OR L34) NOT 2001-2002/PY
FILE 'WPIDS'
       1001634 2001-2002/PY
            14 (L23 OR L35) NOT 2001-2002/PY
L47
TOTAL FOR ALL FILES
           143 (L24 OR L36) NOT 2001-2002/PY
=> dup rem 148
PROCESSING COMPLETED FOR L48
             48 DUP REM L48 (95 DUPLICATES REMOVED)
=> d tot
L49 ANSWER 1 OF 48 HCAPLUS COPYRIGHT 2002 ACS
                                                       DUPLICATE 1
     Nuclear dual specificity phosphatase-like protein and its nucleic acids
ΤI
     PCT Int. Appl., 108 pp.
SO
     CODEN: PIXXD2
IN
     Richardson, Jennifer; Vassiliadis, John; Shyjan, Andrew W.
ΑN
     2000:457192 HCAPLUS
     133:85155
DN
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO. DATE
                      ----
PΙ
     WO 2000039277
                      A2
                            20000706
                                           WO 1999-US30744 19991222
                      A3 20001109
     WO 2000039277
             AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
             CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
             IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
             MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
             SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
L49
      ANSWER 2 OF 48 BIOTECHDS COPYRIGHT 2002 DERWENT INFO AND ISI
ΤI
      Novel dual-specificity mitogen-activated protein-kinase polypeptide
      useful in screening assays for identifying agents that modulate activity
      of the protein which are useful for treating cancer and autoimmune
      diseases;
         vector-mediated gene transfer and expression in host cell and antibody
ΑU
      Luche R M; Wei B
      2001-01529 BIOTECHDS
AN
      WO 2000060092 12 Oct 2000
PΤ
L49
      ANSWER 3 OF 48 BIOTECHDS COPYRIGHT 2002 DERWENT INFO AND ISI
ΤI
      New isolated nucleic acid molecules encoding human nuclear
      dual specificity phosphatase-like protein for
      diagnosis of androgen independent prostate cancers;
         vector-mediated gene transfer and expression in mammal cell and
         monoclonal antibody
ΑU
      Richardson J; Vassiliadis J; Shyjan A W
```

FILE 'ESBIOBASE'

- AN 2000-12150 BIOTECHDS
- PI WO 2000039277 6 Jul 2000
- L49 ANSWER 4 OF 48 WPIDS COPYRIGHT 2002 DERWENT INFORMATION LTD
- TI Novel dual-specificity mitogen activated protein kinase phosphatase polypeptide useful in screening assays for identifying agents that modulate activity of the protein which are useful for treating cancer and autoimmune diseases.
- PI WO 2000060092 A2 20001012 (200064)* EN 60p C12N015-52
 - RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW
 - W: AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

AU 2000042067 A 20001023 (200107)

C12N015-52

- IN LUCHE, R M; WEI, B
- L49 ANSWER 5 OF 48 WPIDS COPYRIGHT 2002 DERWENT INFORMATION LTD
- TI Digital recorder has digital signal processor which switches detected recording rate by flash memory during searching of fixed position in memory.
- PI JP 2000100139 A 20000407 (200028)* 11p G11B027-10
- L49 ANSWER 6 OF 48 WPIDS COPYRIGHT 2002 DERWENT INFORMATION LTD
- TI Audio decoder for reproduction of compressed digital audio signals from optical disk, comprises one DSP for decoding and storing process result, and another DSP for decoding stored process result.
- PI JP 2000059232 A 20000225 (200021)* 14p H03M007-30
- L49 ANSWER 7 OF 48 MEDLINE

DUPLICATE 2

- TI An essential phosphorylation-site domain of human cdc25C interacts with both 14-3-3 and cyclins.
- SO JOURNAL OF BIOLOGICAL CHEMISTRY, (2000 Sep 15) 275 (37) 28849-57. Journal code: HIV; 2985121R. ISSN: 0021-9258.
- AU Morris M C; Heitz A; Mery J; Heitz F; Divita G
- AN 2000496137 MEDLINE
- L49 ANSWER 8 OF 48 HCAPLUS COPYRIGHT 2002 ACS
- TI mVH1, a dual-specificity phosphatase whose expression is cell cycle regulated
- SO Mammalian Genome (2000), 11(12), 1154-1156 CODEN: MAMGEC; ISSN: 0938-8990
- AU Zhang, Xin-Min; Dormady, Shane P.; Chaung, Wenren; Basch, Ross S.
- AN 2001:8820 HCAPLUS
- DN 135:89064
- L49 ANSWER 9 OF 48 NTIS COPYRIGHT 2002 NTIS
- TI Novel Combinatorial Chemistry-Derived Inhibitors of Oncogenic Phosphatases. (Annual rept. 15 Jul 1998-14 Jul 1999.)
- NR ADA376115/XAB
 - 154 p. NTIS Prices: PC A09/MF A02

Availability: Product reproduced from digital image. Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)605-6900; and email at orders ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.

- PD Aug 1999
- AU Lazo, J. S.

```
2000(34):86
                     NTIS
AN
     ANSWER 10 OF 48 HCAPLUS COPYRIGHT 2002 ACS
L49
     Dual specificity phosphatase PTEN and methods of use and structure of PTEN
     gene
SO
     PCT Int. Appl., 60 pp.
     CODEN: PIXXD2
ΙN
     Tonks, Nicholas K.; Myers, Michael P.
     1999:64950 HCAPLUS
AN
     130:135002
DN
     PATENT NO.
                                           APPLICATION NO. DATE
                      KIND DATE
                      ____
                                           -----
PΙ
     WO 9902704
                      A2
                            19990121
                                           WO 1998-US14205 19980708
     WO 9902704
                       A3
                            19990401
         W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG,
             KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,
             NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
             UA, UG, US, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
             CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     AU 9884794
                       Α1
                            19990208
                                           AU 1998-84794
                                                            19980708
L49 ANSWER 11 OF 48 WPIDS COPYRIGHT 2002
                                             DERWENT INFORMATION LTD
     Plasma display panel connected to video camera, DVD player - has digital
TΙ
     signal processor that outputs video signal which is fed to plasma display
     panel drive that drives plasma panel display.
PΙ
     JP 11327504 A 19991126 (200007)*
                                                     G09G003-28
L49 ANSWER 12 OF 48 WPIDS COPYRIGHT 2002
                                             DERWENT INFORMATION LTD
TΤ
     Digital signal processor in servo signal generation apparatus for
     reproducing video from digital video disk - consists of adder that adds
     output of high frequency phase compensation circuit with low frequency
     phase compensation circuit output.
     JP 11312369
                   A 19991109 (200004)*
PI
                                              25p
                                                     G11B021-10
L49
    ANSWER 13 OF 48 WPIDS COPYRIGHT 2002
                                             DERWENT INFORMATION LTD
ΤI
     Interconnection confirmation procedure for macro modules in semiconductor
     device - involves storing testing program in memory of semiconductor
     device, based on which interconnection between macro modules is confirmed.
     JP 11142487 A 19990528 (199932) *
PΙ
                                              14p
                                                     G01R031-317
     JP 3039489
                   B2 20000508 (200027)
                                              13p
                                                     G01R031-317
L49
     ANSWER 14 OF 48 WPIDS COPYRIGHT 2002
                                             DERWENT INFORMATION LTD
TI
     Analog-to-digital (A/D) signal converter using large dynamic conversion
     range - has switch unit that chooses digital output signal from either one
     of delay units based on monitoring result of switching detector.
PI
     JP 11017550 A 19990122 (199914)*
                                             12p
                                                     H03M003-02
     US 6104329
                  A 20000815 (200041)
                                                     H03M001-62
IN
     KAWANO, T
    ANSWER 15 OF 48
L49
                         MEDLINE
                                                        DUPLICATE 3
     Characterization of the interactions between human cdc25C, cdks, cyclins
TI
     and cdk-cyclin complexes.
SO
     JOURNAL OF MOLECULAR BIOLOGY, (1999 Feb 19) 286 (2) 475-87.
     Journal code: J6V; 2985088R. ISSN: 0022-2836.
     Morris M C; Divita G
AU
```

ΑN

1999141201

MEDLINE

- L49 ANSWER 16 OF 48 MEDLINE DUPLICATE 4
- TI Genomic structure, chromosomal location, and mutation analysis of the human CDC14A gene.
- SO GENOMICS, (1999 Jul 15) 59 (2) 248-51. Journal code: GEN; 8800135. ISSN: 0888-7543.
- AU Wong A K; Chen Y; Lian L; Ha P C; Petersen K; Laity K; Carillo A; Emerson M; Heichman K; Gupte J; Tavtigian S V; Teng D H
- AN 1999339990 MEDLINE
- L49 ANSWER 17 OF 48 SCISEARCH COPYRIGHT 2002 ISI (R)
- TI Parallel implementation of a fast third-order Volterra digital filter
- JOURNAL OF VLSI SIGNAL PROCESSING SYSTEMS FOR SIGNAL IMAGE AND VIDEO TECHNOLOGY, (JUN 1999) Vol. 21, No. 2, pp. 117-130.

 Publisher: KLUWER ACADEMIC PUBL, SPUIBOULEVARD 50, PO BOX 17, 3300 AA DORDRECHT, NETHERLANDS.

 ISSN: 0922-5773.
- AU Kwan H (Reprint); Im S; Powers E J; Swartzlander E E
- AN 1999:515442 SCISEARCH
- L49 ANSWER 18 OF 48 NTIS COPYRIGHT 2002 NTIS
- TI Novel Combinatorial Chemistry-Derived Inhibitors of Oncogenic Phosphatases. (Annual rept. 15 Jul 97-14 Jul 98.)
- NR ADA365481/XAB
 117 p. NTIS Prices: PC A07/MF A02
 Availability: Product reproduced from digital image. Order this product
 from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000
 (other countries); fax at (703)605-6900; and email at orders
 ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield,
 VA, 22161, USA.
- PD Aug 1998
- AU Lazo, J. S.
- AN 1999(43):628 NTIS
- L49 ANSWER 19 OF 48 WPIDS COPYRIGHT 2002 DERWENT INFORMATION LTD
- TI Sound volume adjustment control system for DSP type audio equipment of vehicle has controller which regulates DSP based on received door release signals from sensors, by switching OFF sound volume correction function of DSP.
- PI JP 10264731 A 19981006 (199850)* 8p B60R011-02
- L49 ANSWER 20 OF 48 WPIDS COPYRIGHT 2002 DERWENT INFORMATION LTD
- TI Video conferencing apparatus with voice control function has controller which sets voice signal level cutting limit of DSP to value greater than normal value upon detection of silence mode setting by mode setting switch.
- PI JP 10032638 A 19980203 (199815) * 6p H04M003-56
- L49 ANSWER 21 OF 48 WPIDS COPYRIGHT 2002 DERWENT INFORMATION LTD
- TI Reception clock regeneration method for digital data communication involves supplying phase control signal from DSP to frequency divider based on phase error information.
- PI JP 10013217 A 19980116 (199813)* 5p H03L007-06
- L49 ANSWER 22 OF 48 MEDLINE DUPLICATE 5
- TI Characterization of the myotubularin dual specificity phosphatase gene family from yeast to human.
- SO HUMAN MOLECULAR GENETICS, (1998 Oct) 7 (11) 1703-12. Journal code: BRC; 9208958. ISSN: 0964-6906.

- AU Laporte J; Blondeau F; Buj-Bello A; Tentler D; Kretz C; Dahl N; Mandel J L
- AN 1998409499 MEDLINE
- L49 ANSWER 23 OF 48 MEDLINE DUPLICATE 6
- TI Pten is essential for embryonic development and tumour suppression.
- SO NATURE GENETICS, (1998 Aug) 19 (4) 348-55. Journal code: BRO; 9216904. ISSN: 1061-4036.
- AU Di Cristofano A; Pesce B; Cordon-Cardo C; Pandolfi P P
- AN 1998361160 MEDLINE
- L49 ANSWER 24 OF 48 MEDLINE DUPLICATE 7
- TI Calreticulin associates with stress proteins: implications for chaperone function during heat stress.
- SO JOURNAL OF CELLULAR BIOCHEMISTRY, (1998 Apr 1) 69 (1) 30-43. Journal code: HNF; 8205768. ISSN: 0730-2312.
- AU Jethmalani S M; Henle K J
- AN 1998174229 MEDLINE
- L49 ANSWER 25 OF 48 HCAPLUS COPYRIGHT 2002 ACS
- TI X-ray crystal structure of human vH1-related dual specificity phosphatase (vaccinia H1, protein phosphorylation)
- SO (1997) 148 pp. Avail.: UMI, Order No. DA9732215 From: Diss. Abstr. Int., B 1997, 58(5), 2415
- AU Yuvaniyama, Jirundon
- AN 1997:668812 HCAPLUS
- DN 127:356490
- L49 ANSWER 26 OF 48 WPIDS COPYRIGHT 2002 DERWENT INFORMATION LTD
- TI Servo apparatus for controlling servo system using DSP includes DSP which performs operation of drive indication signal from output of A/D converter and detects phase difference of applied sine wave signal.
- PI JP 09274505 A 19971021 (199801)* 6p G05B013-02 US 5877605 A 19990302 (199916) G05B011-32
- IN ARAI, H
- L49 ANSWER 27 OF 48 MEDLINE DUPLICATE 8
- TI P-TEN, the tumor suppressor from human chromosome 10q23, is a dual-specificity phosphatase.
- PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, (1997 Aug 19) 94 (17) 9052-7.

 Journal code: PV3; 7505876. ISSN: 0027-8424.
- AU Myers M P; Stolarov J P; Eng C; Li J; Wang S I; Wigler M H; Parsons R; Tonks N K
- AN 97404346 MEDLINE
- L49 ANSWER 28 OF 48 MEDLINE DUPLICATE 9
- TI Molecular cloning and functional characterization of a novel mitogen-activated protein kinase phosphatase, MKP-4.
- SO JOURNAL OF BIOLOGICAL CHEMISTRY, (1997 Feb 21) 272 (8) 5141-51. Journal code: HIV; 2985121R. ISSN: 0021-9258.
- AU Muda M; Boschert U; Smith A; Antonsson B; Gillieron C; Chabert C; Camps M; Martinou I; Ashworth A; Arkinstall S
- AN 97184169 MEDLINE
- L49 ANSWER 29 OF 48 MEDLINE DUPLICATE 10
- TI Chromosomal localization of three human dual specificity phosphatase genes (DUSP4, DUSP6, and DUSP7).
- SO GENOMICS, (1997 Jun 15) 42 (3) 524-7.

- Journal code: GEN; 8800135. ISSN: 0888-7543.
- AU Smith A; Price C; Cullen M; Muda M; King A; Ozanne B; Arkinstall S; Ashworth A
- AN 97349124 MEDLINE
- L49 ANSWER 30 OF 48 MEDLINE DUPLICATE 11
- TI Stevastelins, a novel group of immunosuppressants, inhibit dual-specificity protein phosphatases.
- SO CHEMISTRY AND BIOLOGY, (1997 Apr) 4 (4) 279-86. Journal code: CNA; 9500160. ISSN: 1074-5521.
- AU Hamaguchi T; Masuda A; Morino T; Osada H
- AN 97339728 MEDLINE
- L49 ANSWER 31 OF 48 MEDLINE DUPLICATE 12
- TI VHR and PTP1 protein phosphatases exhibit remarkably different active site specificities toward low molecular weight nonpeptidic substrates.
- SO BIOCHEMISTRY, (1996 Jul 23) 35 (29) 9349-54. Journal code: AOG; 0370623. ISSN: 0006-2960.
- AU Chen L; Montserat J; Lawrence D S; Zhang Z Y
- AN 96302231 MEDLINE
- L49 ANSWER 32 OF 48 HCAPLUS COPYRIGHT 2002 ACS
- TI Differential regulation of the MAP, SAP and RK/p38 kinases by Pyst1, a novel cytosolic dual-specificity phosphatase
- SO EMBO J. (1996), 15(14), 3621-3632 CODEN: EMJODG; ISSN: 0261-4189
- AU Groom, Linda A.; Sneddon, Alan A.; Alessi, Dario R.; Dowd, Stephen; Keyse, Stephen M.
- AN 1996:479542 HCAPLUS
- DN 125:191459
- L49 ANSWER 33 OF 48 SCISEARCH COPYRIGHT 2002 ISI (R)
- TI INVOLVEMENT OF LOCUS-COERULEUS PROJECTIONS IN OPIATE WITHDRAWAL BUT NOT IN OPIATE TOLERANCE IN MICE
- SO EUROPEAN JOURNAL OF PHARMACOLOGY, (25 JUL 1996) Vol. 308, No. 3, pp. 271-274.
 ISSN: 0014-2999.
- AU DOSSIN O; HANOUN N; ZAJAC J M (Reprint)
- AN 96:607817 SCISEARCH
- L49 ANSWER 34 OF 48 SCISEARCH COPYRIGHT 2002 ISI (R)
- TI DSP-4 TREATMENT INFLUENCES OLFACTORY PREFERENCES OF DEVELOPING RATS
- SO BRAIN RESEARCH, (04 MAR 1996) Vol. 711, No. 1-2, pp. 26-33. ISSN: 0006-8993.
- AU CORNWELL C A (Reprint); CHANG J W; COLE B; FUKADA Y; GIANULLI T; RATHBONE E A; MCFARLANE H; MCGAUGH J L
- AN 96:239811 SCISEARCH
- L49 ANSWER 35 OF 48 WPIDS COPYRIGHT 2002 DERWENT INFORMATION LTD
- TI Audio mixer for VTR uses signal control unit which controls signal level of first and second input audio signals based on operation data read from storage unit.
- PI JP 07312022 A 19951128 (199605)* 6p G11B020-02
- L49 ANSWER 36 OF 48 MEDLINE DUPLICATE 13
- TI Transition state and rate-limiting step of the reaction catalyzed by the human dual-specificity phosphatase,
 VHR.
- SO BIOCHEMISTRY, (1995 Dec 12) 34 (49) 16088-96.

- Journal code: AOG; 0370623. ISSN: 0006-2960.
- Zhang Z Y; Wu L; Chen L ΑU
- 96101440 ANMEDLINE
- L49 ANSWER 37 OF 48

DUPLICATE 14

- TIHuman dual specificity phosphatase
 - VHR activates maturation promotion factor and triggers meiotic maturation in Xenopus oocytes.
- SO JOURNAL OF BIOLOGICAL CHEMISTRY, (1995 Jun 9) 270 (23) 14229-34. Journal code: HIV; 2985121R. ISSN: 0021-9258.
- ΑU Aroca P; Bottaro D P; Ishibashi T; Aaronson S A; Santos E
- ΑN 95294034 MEDLINE
- L49 ANSWER 38 OF 48 MEDLINE

DUPLICATE 15

- A novel dual specificity phosphatase induced by serum stimulation and heat ΤI
- JOURNAL OF BIOLOGICAL CHEMISTRY, (1994 Nov 25) 269 (47) 29897-902. SO Journal code: HIV; 2985121R. ISSN: 0021-9258.
- Ishibashi T; Bottaro D P; Michieli P; Kelley C A; Aaronson S A ΑU
- 95050849 MEDLINE AN
- L49 ANSWER 39 OF 48 SCISEARCH COPYRIGHT 2002 ISI (R)
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